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109TH CONGRESS 1ST SESSION S. 364

[Report No. 109-102]

To establish a program within the National Oceanic and Atmospheric Administration to integrate Federal coastal and ocean mapping activities.

IN THE SENATE OF THE UNITED STATES

February 10, 2005

Mr. Inouye (for himself, Mr. Stevens, Mr. Lott, Ms. Cantwell, Ms. Snowe, Mr. Kerry, Mr. Lautenberg, Mr. Sarbanes, and Mr. Gregg) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

July 13, 2005

Reported by Mr. STEVENS, with amendments

[Omit the part struck through and insert the part printed in italic]

A BILL

To establish a program within the National Oceanic and Atmospheric Administration to integrate Federal coastal and ocean mapping activities.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

1 SECTION 1. SHORT TITLE.

2	This	Act	mav	be	cited	as	the	"Ocean	and	Coastal

- 3 Mapping Integration Act".
- 4 SEC. 2. INTEGRATED OCEAN AND COASTAL MAPPING PRO-
- 5 GRAM.
- 6 (a) In General.—The Administrator of the Na-
- 7 tional Oceanic and Atmospheric Administration shall es-
- 8 tablish a program to develop, in coordination with the
- 9 Interagency Committee on Ocean and Coastal Mapping,
- 10 a coordinated and comprehensive Federal ocean and coast-
- 11 al mapping plan for the Great Lakes and Coastal State
- 12 waters, the territorial sea, the exclusive economic zone,
- 13 and the continental shelf of the United States that en-
- 14 hances ecosystem approaches in decision-making for con-
- 15 servation and management of marine resources and habi-
- 16 tats, establishes research priorities, supports the siting of
- 17 research and other platforms, and advances ocean and
- 18 coastal science.
- 19 (b) Program Parameters.—In developing such a
- 20 program, the Administrator shall work with the Com-
- 21 mittee to—
- 22 (1) identify all Federal and federally-funded
- programs conducting shoreline delineation and ocean
- or coastal mapping, noting geographic coverage, fre-
- 25 quency, spatial coverage, resolution, and subject

- 1 matter focus of the data and location of data ar-2 chives;
 - (2) promote cost-effective, cooperative mapping efforts that incorporate policies for private sector contracting among all Federal agencies conducting ocean and coastal mapping agencies by increasing data sharing, developing data acquisition and metadata standards, and facilitating the interoperability of in situ data collection systems, data processing, archiving, and distribution of data products;
 - (3) facilitate the adaptation of existing technologies as well as foster expertise in new ocean and coastal mapping technologies, including through research, development, and training conducted in cooperation with the private sector, academia, and other non-Federal entities;
 - (4) develop standards and protocols for testing innovative experimental mapping technologies and transferring new technologies between the Federal Government and the private sector or academia;
 - (5) centrally archive, manage, and distribute data sets as well as provide mapping products and services to the general public in service of statutory requirements;

- 1 (6) develop specific data presentation standards 2 for use by Federal, State, and other entities that 3 document locations of federally-permitted activities, living and nonliving resources, marine ecosystems, 5 sensitive habitats, submerged cultural resources, un-6 dersea cables, offshore aquaculture projects, and any 7 areas designated for the purposes of environmental 8 protection or conservation and management of living 9 marine resources; and
- 10 (7) identify the procedures to be used for co-11 ordinating Federal data with State and local govern-12 ment programs.

13 SEC. 3. INTERAGENCY COMMITTEE ON OCEAN AND COAST-

- 14 AL MAPPING.
- 15 (a) ESTABLISHMENT.—There is hereby established 16 an Interagency Committee on Ocean and Coastal Map-17 ping.
- 18 (b) Membership.—The Committee shall be com-
- 20 with ocean and coastal mapping and surveying responsibil-

prised of senior representatives from Federal agencies

- 21 ities. The representatives shall be high-ranking officials of
- 22 their respective agencies or departments and, whenever
- 23 possible, the head of the portion of the agency or depart-
- 24 ment that is most relevant to the purposes of this Act.
- 25 Membership shall include senior representatives from the

- 1 National Oceanic and Atmospheric Administration, the
- 2 Chief of Naval Operations, the United States Geological
- 3 Survey, Minerals Management Service, National Science
- 4 Foundation, National Geospatial-Intelligence Agency,
- 5 United States Army Corps of Engineers, United States
- 6 Coast Guard, Environmental Protection Agency, Federal
- 7 Emergency Management Agency and National Aero-
- 8 nautics and Space Administration, and other appropriate
- 9 Federal agencies involved in ocean and coastal mapping.
- 10 (c) Chairman.—The Committee shall be chaired by
- 11 the representative from the National Oceanic and Atmos-
- 12 pheric Administration. The chairman may create sub-
- 13 committees chaired by any member agency of the com-
- 14 mittee. Working groups may be formed by the full Com-
- 15 mittee to address issues of short duration.
- 16 (d) Meetings.—The Committee shall meet on a
- 17 quarterly basis, but subcommittee or working group meet-
- 18 ings shall meet on an as-needed basis.
- 19 (e) Coordination.—The committee should shall co-
- 20 ordinate activities, when appropriate, with—
- 21 (1) other Federal efforts, including the Digital
- Coast, Geospatial One-Stop, and the Federal Geo-
- 23 graphic Data Committee;
- 24 (2) international mapping activities; and

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1	(3) States and user groups through workshops
2	and other appropriate mechanisms. mechanisms; and
3	(4) representatives of the private sector.
4	SEC. 4. NOAA INTEGRATED MAPPING INITIATIVE.
5	(a) In General.—Not later than 6 months after the
6	date of enactment of this Act, the Administrator, in con-
7	sultation with the Committee, shall develop and submit to
8	the Congress a plan for an integrated ocean and coastal
9	mapping initiative within the National Oceanic and At-
10	mospheric Administration.
11	(b) Plan Requirements.—The plan shall—
12	(1) identify and describe all ocean and coastal
13	mapping programs within the agency, including
14	those that conduct mapping or related activities in
15	the course of existing missions, such as hydrographic
16	surveys, ocean exploration projects, living marine re-
17	source conservation and management programs,
18	coastal zone management projects, and ocean and
19	coastal science projects;
20	(2) establish priority mapping programs and es-
21	tablish and periodically update priorities for geo-
22	graphic areas in surveying and mapping, as well as
23	minimum data acquisition and metadata standards

for those programs;

- (3) encourage the development of innovative ocean and coastal mapping technologies and applications through research and development through cooperative or other agreements at joint centers of excellence and with the private sector;
 - (4) document available and developing technologies, best practices in data processing and distribution, and leveraging opportunities with other Federal agencies, non-governmental organizations, and the private sector;
 - (5) identify training, technology, and other resource requirements for enabling the National Oceanic and Atmospheric Administration's programs, ships, and aircraft to support a coordinated ocean and coastal mapping program;
 - (6) identify a centralized mechanism or office for coordinating data collection, processing, archiving, and dissemination activities of all such mapping programs within the National Oceanic and Atmospheric Administration, including—
 - (A) designating primary data processing centers to maximize efficiency in information technology investment, develop consistency in data processing, and meet Federal mandates for data accessibility; and

1	(B) designating a repository that is re-
2	sponsible for archiving and managing the dis-
3	tribution of all ocean and coastal mapping data
4	to simplify the provision of services to benefit
5	Federal and State programs; and
6	(6) (7) set forth a timetable for implementation
7	and completion of the plan, including a schedule for
8	periodic Congressional progress reports, and rec-
9	ommendations for integrating approaches developed
10	under the initiative into the interagency program.
11	(c) NOAA JOINT OCEAN AND COASTAL MAPPING
12	CENTERS.—The Administrator is authorized to maintain
13	and operate up to 3 joint ocean and coastal mapping cen-
14	ters, including a joint hydrographic center, which shall be
15	co-located with an institution of higher education. The
16	centers shall serve as hydrographic centers of excellence
17	and are authorized to conduct activities necessary to carry
18	out the purposes of this Act, including—
19	(1) research and development of innovative
20	ocean and coastal mapping technologies, equipment
21	and data products;
22	(2) mapping of the United States outer conti-
23	nental shelf;
24	(3) data processing for non-traditional data and
25	uses;

- 1 (4) advancing the use of remote sensing tech2 nologies, for related issues, including mapping and
 3 assessment of essential fish habitat and of coral re4 sources, ocean observations and ocean exploration;
 5 and
- 6 (5) providing graduate education in ocean and 7 coastal mapping sciences for National Oceanic and 8 Atmospheric Administration Commissioned Officer 9 Corps, personnel of other agencies with ocean and 10 coastal mapping programs, and civilian personnel.
- 11 (d) NOAA REPORT.—The Administrator shall con-12 tinue developing a strategy for expanding contracting with private entities to minimize duplication and take maximum advantage of private sector capabilities in fulfilling 14 15 the Administration's mapping and charting responsibilities. Within 120 days after the date of enactment of this Act, the Administrator shall transmit a report describing the strategy developed under this subsection to the Senate 18 19 Committee on Commerce, Science, and Transportation and 20 the House of Representatives Committee on Resources.

21 SEC. 5. INTERAGENCY PROGRAM REPORTING.

No later than 18 months after the date of enactment of this Act, and bi-annually thereafter, the Chairman of the Committee shall transmit to the Senate Committee on Commerce, Science, and Transportation and the House of

1	Representatives Committee on Resources a report detail-
2	ing progress made in implementing the provisions of this
3	Act, including—
4	(1) an inventory of ocean and coastal mapping
5	data, noting the metadata, within the territorial seas
6	and the exclusive economic zone and throughout the
7	continental shelf of the United States, noting the
8	age and source of the survey and the spatial resolu-
9	tion (metadata) of the data;
10	(2) identification of priority areas in need of
11	survey coverage using present technologies;
12	(3) a resource plan that identifies when priority
13	areas in need of modern ocean and coastal mapping
14	surveys can be accomplished;
15	(4) the status of efforts to produce integrated
16	digital maps of ocean and coastal areas;
17	(5) a description of any products resulting from
18	coordinated mapping efforts under this Act that im-

- (5) a description of any products resulting from coordinated mapping efforts under this Act that improve public understanding of the coasts, oceans, or regulatory decision-making;
- 21 (6) documentation of minimum and desired 22 standards for data acquisition and integrated 23 metadata;

1	(7) a statement of the status of Federal efforts
2	to leverage mapping technologies, coordinate map-
3	ping activities, share expertise, and exchange data;
4	(8) a statement of resource requirements for or-
5	ganizations to meet the goals of the program, includ-
6	ing technology needs for data acquisition, processing
7	and distribution systems;
8	(9) a statement of the status of efforts to de-
9	classify data gathered by the Navy, the National
10	Geospatial-Intelligence Agency and other agencies to
11	the extent possible without jeopardizing national se-
12	curity, and make it available to partner agencies and
13	the public; and
14	(10) a resource plan for a digital coast inte-
15	grated mapping pilot project for the northern Gulf
16	of Mexico that will—
17	(A) cover the area from the authorized
18	coastal counties through the territorial sea;
19	(B) identify how such a pilot project will
20	leverage public and private mapping data and
21	resources, such as the United States Geological
22	Survey National Map, to result in an oper-
23	ational coastal change assessment program for

the subregion; and

1	(11) the status of efforts to coordinate Federal
2	programs with State and local government programs
3	and leverage those programs. programs; and
4	(12) describes efforts of Federal agencies to in-
5	crease private sector contracting.
6	SEC. 6. AUTHORIZATION OF APPROPRIATIONS.
7	(a) In General.—In addition to the amounts au-
8	thorized by section 306 of the Hydrographic Services Im-
9	provement Act of 1998 (33 U.S.C. 892d), there are au-
10	thorized to be appropriated to the Administrator to carry
11	out this Act—
12	(1) \$20,000,000 for fiscal year 2006;
13	(2) \$26,000,000 for fiscal year 2007;
14	(3) \$32,000,000 for fiscal year 2008;
15	(4) \$38,000,000 for fiscal year 2009; and
16	(5) \$45,000,000 for each of fiscal years 2010
17	through 2013.
18	(b) Joint Ocean and Coastal Mapping Cen-
19	TERS.—Of the amounts appropriated pursuant to sub-
20	section (a), the following amounts shall be used to carry
21	out section 4(e) of this Act:
22	(1) \$10,000,000 for fiscal year 2006.
23	(2) \$11,000,000 for fiscal year 2007.
24	(3) \$12,000,000 for fiscal year 2008.
25	(4) \$13,000,000 for fiscal year 2009.

1	(5) \$15,000,000 for each of fiscal years 2010
2	through 2013.
3	(e) Interagency Committee.—Notwithstanding
4	any other provision of law, from amounts authorized to
5	be appropriated for fiscal years 2006 through 2013 to the
6	Department of Defense, the Department of the Interior,
7	the Department of Homeland Security, the Environmental
8	Protection Agency, and the National Aeronautics and
9	Space Administration, the head of each such department
10	or agency may make available not more than $$10,000,000$
11	per fiscal year to carry out interagency activities under
12	section 3 of this Act.
13	SEC. 7. DEFINITIONS.
1314	SEC. 7. DEFINITIONS. In this Act:
14	In this Act:
14 15	In this Act: (1) ADMINISTRATOR.—The term "Adminis-
141516	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National
14151617	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National Oceanic and Atmospheric Administration.
14 15 16 17 18	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National Oceanic and Atmospheric Administration. (2) Coastal State.—The term "coastal state"
141516171819	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National Oceanic and Atmospheric Administration. (2) Coastal State.—The term "coastal state" has the meaning given that term by section 304(4)
14 15 16 17 18 19 20	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National Oceanic and Atmospheric Administration. (2) Coastal State.—The term "coastal state" has the meaning given that term by section 304(4) of the Coastal Zone Management Act of 1972 (16)
14 15 16 17 18 19 20 21	In this Act: (1) ADMINISTRATOR.—The term "Administrator" means the Administrator of the National Oceanic and Atmospheric Administration. (2) COASTAL STATE.—The term "coastal state" has the meaning given that term by section 304(4) of the Coastal Zone Management Act of 1972 (16 U.S.C. 1453(4).

- (4) EXCLUSIVE ECONOMIC ZONE.—The term "exclusive economic zone" means the exclusive economic zone of the United States established by Presidential Proclamation No. 5030, of March 10, 1983.
 - (5) OCEAN AND COASTAL MAPPING.—The term "ocean and coastal mapping" means the acquisition, processing, and management of physical, biological, geological, chemical, and archaeological characteristics and boundaries of ocean and coastal areas, resources, and sea beds through the use of acoustics, satellites, aerial photogrammetry, light and imaging, direct sampling, and other mapping technologies.
 - (6) TERRITORIAL SEA.—The term "territorial sea" means the belt of sea measured from the baseline of the United States determined in accordance with international law, as set forth in Presidential Proclamation Number 5928, dated December 27, 1988.

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JULY 13, 2005

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